

**EMS PRIVATIZATION:
WHERE THE CUSTOMER COMES SECOND**

STRATEGIC MANAGEMENT OF CHANGE

BY: H. Michael Drumm
City of Markham Fire Department
Markham, Illinois

An applied research project submitted to the National Fire Academy
as part of the Executive Fire Officer Program

March 1999

ABSTRACT

In 1997 the City of Markham subcontracted its emergency medical services (EMS). The change was neither strategic nor well planned. Privatization was done for all the right reasons. The problem was that the EMS customers' needs and wants were lost during the change process. This project examined privatization as a change process and whether EMS providers properly identify their customers' priorities in EMS delivery.

This project used multiple research methodologies in two stages. The first stage was historical to gain an insight into the change process. The second stage used descriptive and evaluative research to address the following hypothesis: "Municipal EMS providers know and address customer priorities in the EMS delivery systems they administrate and do not need to change their EMS delivery priorities."

A literature review and two interviews were conducted. Questionnaire and survey instruments were developed to identify and compare the priorities of EMS provider subject matter experts (SMEs) and customers. The results were ranked for statistical comparison. A bivariate correlation, Spearman's rho, was used to compare the results of sections two and three of these instruments for statistical significance.

The SMEs have basically placed the considerations into two tiers, while the survey respondents have placed them into three tiers. The correlation comparison for section two indicated a statistically significant relationship between the SMEs ranked responses and those of the survey respondents. The correlation comparison for section three was not statistically significant. Based on these observations the hypothesis was rejected.

Current EMS providers need to complete a needs analysis of their system's delivery from the

customers' point of view before considering any type of change. One important result of this project was the statistically significant difference in priority and comparison identification between EMS providers and customers.

ACKNOWLEDGMENT

A project of this magnitude is never a solitary undertaking. There are far too many elements in an Applied Research Project for me to take sole credit for this paper. I may be the chef, but somebody had to help me stir the pot.

First and foremost I have to thank my wife and soul-mate, Janice. I think it is fair to say that every time a fire executive is accepted into the Executive Fire Officer Program, the acceptance really entails a four-year commitment from two individuals: the EFOP candidate and the spouse or partner. I do not think Janice minds the two weeks without me each year. But I know she did not plan on the terror known as the applied research project. I had documents, books, journals, and articles spread throughout every room in our home from September to February. Honey, the house is yours again, for now. And yes dear, I will change my attitude.

I feel that I took a big bite of the apple when I formulated my plan and hypothesis for this project. But it is a subject I feel very strongly about and have witnessed firsthand in a negative way. The magnitude of the questionnaire and survey process required the assistance of many advisors and experts. They include my graduate professors at DePaul University (Dean Eitel, Matthew Liao-Troth, and Sue Sanders, CSM), Chief Robert Zamor and Ms. Jean Bratton of the Libertyville (Illinois) Fire Department, and Dr. Burton Clark at the National Fire Academy. Dr. Clark turned out to be one of my APA compliance experts and a great sounding board for melding my ideas down into a workable monster.

Double thanks to Matthew Liao-Troth for also editing my work and putting up with my incessant questions about APA and statistical procedures. I may own authorship for this project, but the

work is ours.

TABLE OF CONTENTS

ABSTRACT	3
ACKNOWLEDGMENT	5
TABLE OF CONTENTS	6
LIST OF TABLES	8
LIST OF FIGURES	9
INTRODUCTION	10
BACKGROUND AND SIGNIFICANCE	11
(Background)	11
(Significance)	12
LITERATURE REVIEW	13
(Change management)	13
(Privatization as change)	16
PROCEDURES	19
(Interviews)	19
(Questionnaires and Surveys)	22
(Limitations)	25
RESULTS	26
(Questionnaires)	26
(Surveys)	27

TABLE OF CONTENTS (continued)

(Statistical comparisons)	28
(Interviews)	31
DISCUSSION	31
RECOMMENDATIONS	33
REFERENCES	36
APPENDIX A (Markham Fire Department mission statement)	39
APPENDIX B (Rules and Regulations, Section 9.1: EMS)	40
APPENDIX C (Chicago Sun Times news article: 05/07/1997)	41
APPENDIX D (Notice to Markham residents)	42
APPENDIX E (IAFF Local 3209 newsletter appeal)	43
APPENDIX F (Questionnaire and cover letter)	44
APPENDIX G (Survey)	47
APPENDIX H (Time-line matrix)	49
APPENDIX I (First draft of survey)	50
APPENDIX J (Revised survey)	54
APPENDIX K (Test survey and test instructions)	55
APPENDIX L (Tests groups' comments)	58
APPENDIX M (Sample of reminder postcard)	60

APPENDIX N	(Tables of results and data)	61
APPENDIX O	(Handwritten Survey Comments)	74

LIST OF TABLES

TABLE ONE	(Correlation for section two)	28
TABLE TWO	(Correlation for section three)	29
APPENDIX N	(Tables A through P)	61
Table A	(Questionnaire responses to question #8)	61
Table B	(Questionnaire responses to question #9)	63
Table C	(Questionnaire frequencies and descriptives)	65
Table D	(Survey frequencies and descriptives)	67
Table E	(Section two scatter plot)	71
Table F	(Section three scatter plot)	72
Table G	(EMS use frequencies)	73

LIST OF FIGURES

FIGURE ONE	(Rank comparison of section two)	28
FIGURE TWO	(Rank comparison of section three)	29

INTRODUCTION

In 1997, the City of Markham joined a growing number of communities across the country in subcontracting its emergency medical services (EMS) to a private, for-profit provider. The City Council, by a three-fifths majority, entered into a three year contract with Consolidated Medical Transport Daley's Ambulance Division (CoMed), a private, for-profit EMS provider.

The City of Markham Fire Department (MFD) had provided EMS since 1952. From the inhalators of the fifties and transport ambulances of the sixties, to the pre-hospital care of the seventies and paramedic services of the eighties, the underlying common thread was the fire department as provider. But that changed in the nineties. Unfortunately the change was neither strategic nor well planned.

The move to privatization was done for all the right reasons: saving money, allowing firefighters to concentrate on providing fire-related services, and improving the level of EMS in the city. But somehow the needs and wants of the customer were lost in the shuffle. No one asked how this change would affect the EMS patient. No one asked what patient or customer concerns the change should address. No one asked what was important to the person lying on the cot, or to the family as they watched the ambulance leave with their loved one. The EMS customers' needs and wants were lost during the change process.

This project used multiple research methodologies in two stages. The first stage was primarily a historical literature review. It would be used to gain a further insight into the change process itself, an expansion on the lessons taught in *The Strategic Management of Change* (SMOC). The second stage

used a threefold combination of descriptive and evaluative research, to analyze change element requirements from the customers' point of view, most specifically by identifying their priorities. This step should have been done in the task analysis phase of the change cycle, before the change implementation. The second purpose was to compare how the consumer viewed the differences between municipal and private EMS. The third step was to identify the EMS priorities of municipal providers and compare them to the needs and wants of the customers. This would generate an EMS customer priority list and would also serve as the foundation for the project's final recommendations.

If the priorities did not match, then the research would give municipal EMS providers a consumer-provided checklist to follow. This part of the research would also give an insight into how consumers compare municipal and private EMS. The results should prove invaluable for supporting or stopping a privatization effort. EMS systems administrators would be able to make internal changes to pro-actively answer consumer needs and wants.

The resultant research package would produce a list of EMS customer needs and wants, and identify those areas the customer believes are important in comparing municipal and private services. It would serve the author by allowing him to address those areas CoMed should consider while providing EMS to Markham. It would address the following hypothesis:

“Municipal EMS providers know and address customer priorities in the EMS delivery systems they administrate and do not need to change their EMS priorities.”

BACKGROUND AND SIGNIFICANCE

Background

Part of the mission of the MFD is to protect city inhabitants from the harmful effects of medical emergencies (Appendix A). This role is further emphasized in the EMS Division section of the fire department's rules and regulations (Appendix B). These are generalities; performance is measured by a local system (Cook County South EMS) and state (Illinois Department of Public Health) agencies through policies, call review, and state law(s). Lost in the shuffle is any reference to what the city inhabitants really want from their EMS providers.

When the city council voted to privatize the EMS, part of the change process should have been identifying what value residents placed on EMS and its different components. More so, this was the time to address the citizens' concerns with the differences between municipal and private EMS. The change certainly received coverage. There was a major newspaper article (Appendix C), a flyer printed and distributed by the Markham Professional Firefighters Association, Local 3209 (Appendix D), and a notification to the citizens letters (Appendix E). But the article was generic, the union argument was poorly written without a factual study base, and the notification was after the fact. Here was a perfect example of a large scale, but strategic change. In fact, the four-step SMOC model would be an ideal fit.

At this point, the reader might question why I did not attempt to stop the EMS privatization. The change was mandated by the city's mayor; I am appointed by and work at his direction and pleasure.

Significance

The Executive Fire Officer Program (EFOP) is a four-year educational process at the National

Fire Academy (NFA) for senior fire officers. It develops management and leadership skills through class lectures, team building exercises, presentations, and applied research projects. The second course in the series is the *Strategic Management of Change* (SMOC). The course provided EFOP participants six instruction modules in change management: (A) Introduction to Change Management, (B) The Change Management Model, (C) Managing Change Using the Change Management Model, (D) Leading Change Using the Change Management Model, (E) Personal Aspects of Change Management, and (F) Course Summary. Learned skills were practiced with a multi-level, county organization simulation.

This paper is very significant as an EFOP Applied Research Project (ARP) on two different levels. First, the historical literature review allowed the me to expand on the change management lessons taught in SMOC. Course lessons were affirmed and new areas opened by examining how change experts put SMOC philosophies into real life practices. Second, because a significant change occurred in Markham with the EMS privatization, I was able to view first-hand how driving forces can cause change, regardless of those who may oppose or stand in the way.

This ARP also afforded a chance to conduct a potential needs analysis task, the EMS questionnaire and survey. There is a duality of significance here. Armed with the knowledge of what the Markham EMS customers value in their EMS needs and wants, I can maintain my value as an administrator. The survey format and results can be also used by other departments which may be faced with a similar privatization drive, or as a needs analysis introduction tool.

LITERATURE REVIEW

Change is the driving force behind many of the modern foundations of management practice and theory . . . Almost every aspect of management includes some explicit or implicit managing of change . . . Managing change is at the core of real managing and leadership . . . If someone is only maintaining the status quo in an era of rapid, continuous change they are doing the equivalent of clerical job (Crainer 1995, p. 25).

In order to specifically apply or review any change model or philosophy, one first has to have an overall understanding of the change mechanism. This is especially true as change relates to the organization and system fits (Clement 1994, p. 33; Denton 1995, p. 16). It is important to build on the change foundations taught in SMOC. Then, armed with this generic arsenal, change managers can examine their own specific organization's past change, current change, or change need; they can evaluate the change process, its results and shortcomings.

The literature review was divided into two separate areas of change management. The first area dealt with change management as an overall organizational function. Texts and articles by change experts and authors from the public, private, and nonprofit sectors were examined. The second area looked specifically at privatization as change, especially in fire service and Emergency Medical Services (EMS).

Change Management

It must be realized that there is nothing more difficult to plan, more uncertain of success, or more dangerous to manage than the establishment of a new order of [things]; for he who introduces [change] makes enemies of all those who derived advantage from the old order and finds but

lukewarm defenders among those who stand to gain from the new one (Machiavelli 1541/1961, p. 27).

One of the problems with change is that it creates conflict, identifies winners and losers, and attacks the old order (Bolman & Deal 1997, p. 325; Bottoms 1995, p. 18; Perry 1996, p. 634 and p. 683). “No one is against change unless he or she is the one who must change” (Mariotti 1996, p. 30). Managers or change leaders get so tied up in the change process they forget that change is an organization-wide function (Clement 1994, p. 33; Denton 1995, p. 18; Reynierse 1994, p. 40-41). But proper identification of three key organizational life features will not only facilitate a successful change, but will also overcome these problems. The key areas are: (A) organizational culture, (B) the leadership change effort, and (C) the existing network of power (Bolman & Deal 1997, p. 15; Clement 1994, p. 33; Harrison 1994, p. 39; Kiely 1995, p. 15). Once these areas are identified the change leader then has to understand each one as it relates to the particular agency or organization (Clement 1994, p. 39).

“Management’s leadership in the change effort seems to be the key determinant of whether that change will succeed . . . Management needs to communicate openly with those affected by the change and, once again, collaborate with those same individuals to obtain their input” (Clement 1994, p. 38). Communication is the recurring theme for any chance of successful organizational change. This is true regardless of the driving force behind the change. Open, honest, and timely communication on a top-down, 360° range is essential from start to finish (Pascale et al 1997, p. 137; Perry 1996, p. 156; Reynierse 1994, p. 41; Sheridan 1996, p. 58; Slater 1995, p. 21).

By simultaneously considering two variables (in this case the provider and the customer) rather than each variable separately, the possibility of mutual agreement between the two parties is

enhanced and there is less need for reliance on arbitrary decision rules. The results are more efficient under such rules, in that the preferences of the parties are more fully satisfied (Patton & Sawicki 1993, p. 192).

Tantamount with communication in change importance is the customer or service user. While limited resources may be an underlying reason for privatization, customers' needs and wants had consistently been a driving force behind public-private partnerships and privatization efforts (Condrey 1998, p. 541; Perry 1996, p. 143).

A close correlation exists between a high-performance organization and satisfied customers. Achieving this often requires restructuring work processes to meet customer needs. First, the customers are defined. Next, what the customers want, need, or expect is defined. (A high-performance organization finds out by asking them). Then the customers help identify problems and find solutions (Perry 1996, p. 142).

Privatization As Change

Privatization may involve either continued ownership of public facilities by the government, but with private sector management, or a transfer of ownership as well as operation from the public to the private sector. The theory underlying privatization holds that publicly owned enterprises are less efficient and less flexible than are privately owned companies. Privatization restrains the need for tax increases to provide subsidies for government enterprises (Reissman 1997, p. 22).

"Privatization is just a term for selling of government-owned assets" (Grosse & Yañes 1998, p. 51). It basically means that an outside agency becomes the service provider of a formerly public function instead of the governmental agency or body which had been providing it (Condrey 1998, p.

62).

Public organizations must be quite clear about what makes them or the functions they perform distinctive or unique, or they will be likely candidates for privatization. Indeed, if there is nothing distinctive or unique about a public organization, then perhaps it should be privatized (Bryson 1995, p. 78).

Privatization is not a new or innovative concept. It first came to light as a common government practice in Britain during the early 1800s. Over the last 100 years the British government has privatized British Petroleum, British Steel, British Telecom, British Gas, and British Airways (Grosse & Yañes, p. 52; Olson 1990, p. 3; Time 1991, p. 58). “Governments worldwide are selling off state-owned enterprises. The results should be salutary - - but the process can be painful” (Rudolph 1991, p. 58).

Privatization of Emergency Medical Services is just one of the means to deliver prehospital care.

It is not the only means of providing EMS, but it does work. It is up to the wisdom of elected officials, the medical community, and the people to help ensure that they receive the best possible emergency care regardless of the delivery system (Reissman 1997, p. 29).

Public services are facing many external pressures and internal changes (Pynes 1997, p. 279). First, the internal environment is becoming more stressful, complex and uncertain. Second, the general public as customer is demanding higher quality in even the most basic services. Third, available revenues are falling short fiscally meeting these demands (Perry 1996, p. 682; Sachs 1996, p. 5; Smith 1996, p. 19). The fire service has slowly joined the ranks of other public services which are being measured against the private industry for fiscal responsibility, quality of service, and tangible proof of high productivity (Condrey 1998, p. 48; Olson 1990, p. 3; Pynes 1997, p. 282; Sachs 1996, p. 4).

Traditionally, the most common focus in privatization has been in the areas of economic costs and benefits, but that limited term of reference transfers to a fuller perspective with expanded terms of reference (Grosse & Yañes 1998, p. 53; Pynes 1997, p. 7). There are now five basic factors, all based on efficiency, commonly used to compare public versus private providers in government service: (A) effectiveness, (B) quality, (C) customer service, (D) responsiveness, and (E) equity (Dierking 1992, p. 12; Grosse & Yañes 1998, p. 60; Reissman 1997, p. 23-26; Smith 1996, p. 94-99).

“Some may be growing tired of hearing about privatization. It is, however, a very real concern. The private for-profit ambulance industry is well financed and growing larger each week” (Huisenga 1996, p. 14). One of the main problems in the municipal versus private EMS provider is the perception that one is different from the other. But this is not really the case. “Fire managers will have to adopt a corporate philosophy if they want to be successful in . . . EMS” (Brame 1994, p. 16). EMS is a business. It has cost benefit ratios, profit margins, and marketing concerns (Barber 1996, p. 13; Brame 1994, p. 16; Dierking 1992, p. 12; Huisenga 1996, p. 14; Rusteen 1995, p. 121).

More and more, EMS administrators are even finding themselves bidding against private companies for providing services to their own communities (Brame 1994, p. 16). At the same time, there are national and state efforts underway to legislate services, including EMS, away from municipal providers (Huisenga 1996, p. 14; Kearns 1996, p. 26; Rusteen 1995, p. 121). “Cities are already bringing competition into the picture by privatizing services . . . The new federal highway bill partly privatizes road maintenance” (Grunwald 1992, p. 74). “The EMS community has many examples of municipalities successfully served solely by a commercial ambulance . . .” (Reissman 1997, p. 28).

In 1994, the California Ambulance Association (CAA) sponsored a bill in the California

General Assembly to change emergency medical services (EMS) operations in California. If passed, the Tucker Bill AB 3156 . . . would have tipped the balance toward the private provision of EMS in California . . . The Tucker Bill was defeated at the last moment by direct and personal lobbying . . . (Rusteen 1995, p. 121).

Public agencies are facing organized, effective, and outspoken competition the likes of which have never been seen before (Barber 1996, p. 13-14; Brame 1994, p. 20; Bruce 1994, p. 33; Huisenga, p. 14). “It appears that innovations in procedures and staffing patterns are more likely to be accomplished by privatized agencies” (Reissman 1997, p. 28).

The capital market has identified the EMS industry as having ideal characteristics to make it stronger from a capital perspective, and get a great deal of economy scale, by consolidating duplicative administrative functions, bureaucracies and a variety of very expensive overhead (Bruce 1994, p. 33).

There are even some experts and officials who believe that the time has come for fire departments to return to just fighting fires. This opinion is being voiced nationally and affirmed every time a municipal department privatizes its EMS.

Jack Stout, past president of the American Ambulance Association and a champion of privatization . . . is convinced that the fire service has no future in the ambulance business; that the static deployment of ambulances (responding from fire stations) is not . . . efficient . . . Stout, and the American Ambulance Association, are very clear about their position: the fire service should get out of the ambulance business . . . (Huisenga 1996, p. 14)

PROCEDURES

Interviews

Two interviews were conducted as part of this project: one was with Thomas E. Wappel, Director of Administration for CoMed Transportation (CoMed); the other was with Kimberly Stotts, Rn, BSN.. CoMed is the EMS provider for the City of Markham. Ms. Stotts is the EMS Director, Cook County South (CCS) EMS and EMS Manager at Ingalls Memorial Hospital in Harvey, Illinois. CCS is the regional control for all pre-hospital services in the south suburban Chicago area; Ingalls is the CCS system resource hospital. Mr. Wappel is a state-certified paramedic; Ms. Stotts is a state certified EMS lead instructor.

Both interviews were conducted after the questionnaire and survey instruments were developed. Mr. Wappel was actually interviewed twice. Once in November, before the survey results were known, and then again in January to discuss the survey results. The interview with Ms. Stotts was in December, before the survey results were tabulated.

The first interview with Mr. Wappel was in person at my office. I explained the project to Mr. Wappel, then had him complete the questionnaire and survey, in that order. Mr. Wappel's answers were not used as part of the survey study. He completed the instruments only to give him a feel for the type and area of the project. The second interview was by telephone. The interview with Ms. Stotts was by telephone.

Mr. Wappel has been with CoMed for 17 years, 15 in his current position. As administrative director of CoMed, he directs more than 800 medical response personnel. CoMed handles more than 125,000 medical responses per year. They provide EMS for 13 communities in the south suburban

Cook County, Illinois area. Mr. Wappel stated that, in his opinion, most people who need an emergency ambulance “don’t care who’s providing the service as long as it is getting done.” In fact, he believes that other than seeing the name on the ambulances and uniforms, the public “doesn’t know most of the differences between private and municipal EMS providers.”

Mr. Wappel stated that he believes there is a distinct advantage in experience and this is one area private providers edge out municipal departments. “The overall volume of 9-1-1- calls and other emergency responses we handle far exceeds that of the local departments. Our paramedics have more practice because they are honing their skills more regularly where it matters, on the street,” Wappel said. He also stressed that unlike local fire departments, “private carriers have the ability to offer patients a choice of different hospitals. They aren’t as limited to the nearest or system hospital in non life-threat responses.”

Mr. Wappel believed that there is a misconception in the public about the funding aspects of municipal and private carriers. “Well of course we’re in business to make money,” Wappel said, “but isn’t that the premise of business? Even your Markham city government tries to have a balanced or surplus budget. That’s not a different philosophy, just different wording.” He pointed out that many fire departments charge residents and nonresidents alike for EMS. “In fact,” he said, “call around and check the rates. You’ll find most of them originated with fire departments.” Mr. Wappel also pointed out that Markham residents enjoy a discounted ambulance billing rate over nonresidents who use CoMed as the EMS provider through Markham. “And this is common in every municipal contract with private providers all over the country,” Wappel said.

Ms. Stotts has been with CCS for 16 years. As CCS EMS director for the last six years, she is

responsible (with the project medical director) for 41 EMS response agencies (police, fire, and private providers) with personnel totaling 1300 paramedics and more than 2000 basic response personnel (EMT-A/B). CCS documents more than 150,000 EMS responses per year. Ms. Stotts is in a unique position because her husband is a career firefighter/paramedic in the CCS system. So she sees all the sides of the privatization argument. Ms. Stotts is a strong proponent of expanded care. “Municipal EMS providers seem to be overly focused on treatment,” she said, “but our real focus should be on both treatment and transport. We are responsible for that patient from the time we arrive on the scene until the time we hand them off to the hospital emergency room personnel.” She stated that “people don’t really differentiate when they see a paramedic in an ambulance. To them it is not a firefighter/paramedic, it is someone medically trained to help them and get them to a hospital.”

She also pointed out another area where municipal providers have dropped the ball: working in tandem with the hospitals. “We fail to remember,” Ms. Stotts said, “that hospitals need patients and we are one of the mechanisms that bring patients to them. We are all a team, with a common focus on saving lives and providing the best emergency and life-saving care possible.” She concluded the interview by stressing that “there is no real definition of emergency for patient care. Rather, patient care deals with emergencies as part of the total package.”

Questionnaire/Survey

A cover letter and questionnaire (Appendix F) and survey (Appendix G) were developed to identify and compare the priority beliefs of municipal EMS providers and actual or potential EMS customers. A questionnaire/survey time-line matrix details the development, proofing, mailing, and return process (Appendix H). The questionnaire was by default anonymous, but respondents could request

return information if they elected. It was assured their participation would be confidential. The survey was developed as an anonymous research tool.

The questionnaire was developed by the author with the assistance of Assistant Professor Matthew Liao-Troth, Ph.D. of the Public Services Graduate Program at DePaul University. It would be used to develop the questions on the survey instrument. Questionnaires and cover letters were mailed to each of the 21 class members of the August 1998 Advanced Leadership Issues in Emergency Medical Services (ALIEMS) at the National Fire Academy. The ALIEMS course is designed for upper-level management with responsibility for EMS system delivery (United States Fire Administration 1998-1999, p. 22). Admission to the course is selective based on these criteria. The author felt that the ALIEMS group represented a population sample of subject matter experts (SMEs) as EMS provider managers and administrators. They should be able to identify the key issues and areas of concern in EMS.

The questionnaire consisted of five basic parts: (A) questions describing the respondent's rank, experience, and department demographics, (B) five EMS items the respondent considered to be the five most important considerations in providing EMS, (C) five EMS items the respondent considered lacking in private EMS, (D) indication if the respondent wanted a copy of the questionnaire results, survey, or survey results, and (E) a space for comments (Appendix F). The questionnaire results were tabulated and grouped into like responses. The data from part one were used to compile a demographic overview of the responding SMEs. The data from questionnaire parts two and three were entered into a computer-based statistics program, *Statistics Program for the Social Sciences* (SPSS Version 8.0 for Windows: Chicago)

The results from the questionnaire were then used to develop a survey instrument (Appendix G). The survey was divided into three sections: (A) experience or use of EMS in the last three years, (B) fourteen EMS qualities, and (C) five issues comparing municipal and private EMS. The first section consisted of five questions of which one or more could be checked. The top fourteen responses from the SMEs were placed in rank order for section two; the top five issues were placed in rank order for section three. The questions in sections two and three were answered using a modified Likert scale (four responses), without a middle, or neutral response value.

The survey's first draft was evaluated by Assistant Professor Dean Eitel, Ph.D. and Associate Professor Susan Sanders, C.S.M., Ph.D. both of the Public Services Graduate Program at DePaul University (Appendix I). Their suggestions were incorporated into the revised final survey (Appendix J).

Three Illinois fire department/EMS providers were chosen for testing the survey's validity as a testing instrument: the Country Club Hills Fire Protection District, the Libertyville Fire Department, and the Monee Volunteer Fire Department. Each department received twenty revised surveys. Libertyville was tested twice. Their first test was disqualified because the survey participants were not given the instrument evaluation instructions (Appendix K). Based on the comments from the test surveys (Appendix L), seven questions were revised for the final survey.

The final survey was mailed to 250 Markham residents. They were mailed first class with a postage-paid return envelope. Recipients were selected using a stratified random sampling method (SRSM) from an alphabetical listing of all Markham residents, current as of June 1998. SRSM is a probability sampling method which allows separating the elements of the working population into mutually exclusive groups which are then randomly sampled (Rea and Parker 1997, p. 133-38). In this

case, the alphabet was used because different ethnic groups often have surnames with the same letter (Liao-Troth 1999, personal comment). This might create a disproportionate population sample if a systematic random sampling method was used for the entire Markham population. A systematic random sampling method was then used for each alphabet letter population for a proportionately random sample. Two weeks after the initial mailing, a reminder postcard was sent to all addressees (Appendix M).

A bivariate correlation, Spearman's rho (also called Spearman's Correlation Coefficient for Ranked Data), was used to compare the response rank of the survey respondents to the response rank of the SMEs. All the questionnaire and survey responses were ranked using *SPSS*. A separate correlation test was run for sections two and three. A correlation coefficient measures the strength of a linear association between two variables.

To compute the Spearman's rank correlation coefficient, *SPSS* uses the rank order of each data value in the formula for the Pearson correlation coefficient (adjustments are made if there are ties). The values of this statistic range between -1 and +1 like the Pearson correlation coefficient. However, the assumption of normality is not required, so this measure is appropriate for variables with ordered codes as well as quantitative variables (*SPSS* 1998, p. 178).

This was the most appropriate measure of relation significance between the two data sets because it describes the specific relationship between ranks assigned independently (Witte & Witte 1997, p. 145-6). The test results and subsequent scatter plots would indicate either a positive or negative relation, or no significant relation at all. Prior to calculating the correlation coefficient the data were checked for outliers, which could cause misleading results. There were none observed.

Limitations

There were a data limitation and an instruction error in the final survey. Neither was fatal to the research instrument nor data. The data limitation occurred in the first main area: experience or use of EMS in the last three years. Respondents were instructed to check one or more of the five choices as appropriate. That meant that there could be 25 categories of use experience. This was too many for such a small data set. The purpose of this area was to ascertain respondent experience with EMS for statistically inferential purposes only. The section could have been revised to a yes/no answer, single question format. This would have produced a more manageable data set for EMS use. The instruction error occurred in the third section. It was a grammar error, instructing survey recipients to “please consider each these questions are about personnel who are members of a fire department . . .” The correct syntax should have been “Each of these questions are about personnel who are members of a fire department . . .” This was a result of too much word processor cutting and pasting and not enough proofing and re-proofing during the final revision. None of the returned surveys either identified the error or indicated it confused the respondent.

One might argue that the survey instrument itself was a limitation because it assumed the areas of importance for the respondent. While this is a valid point, the main purpose of the survey/questionnaire process was to compare the priorities of the SMEs to the customer. The base set of information had to come from either group; the author chose the SMEs. By allowing the SMEs open-ended questions and limiting the survey respondents to closed questions, the process stayed subject specific.

RESULTS

Questionnaires of SMEs

The SMEs completed and returned 18 of the 21 questionnaires, for an 85% return. The SMEs responding to the questionnaire were offered the option of receiving all or any of the data from: (A) the questionnaire results, (B) the survey developed from the results, and (C) the survey results. Those requests are listed as totals in Appendix M.

The SMEs identified 34 different considerations in the second section, *Most Important Considerations in Providing EMS*. Of those, 14 were listed by three or more SMEs (41.1%), the remaining 20 were only mentioned once (8.6%) each (see Appendix N, Table A). The 14 multiple responses were placed in the EMS customer survey as section two, *EMS Qualities*.

The SMEs identified 25 different qualities in the third section of the questionnaire, *Areas Lacking in Effect or Absent in Private Carrier EMS*. Of those, 2 were listed by seven SMEs (38.8%), 3 were listed six times (33.3%), 1 was listed five times (27.5%), 1 was listed four times (22.2%), 2 were listed three times (16.6%), 7 were listed two times (11.1%), and 9 were listed once (5.5%) each (see Appendix N, Table B). The five differences listed by at least one third of the SMEs were placed in the survey as section three, *Differences Between Municipal and Private EMS*.

Surveys of Residents

There were 15 surveys returned as undeliverable (6%). Of the remaining 235, 94 were received completed (39.9%). There were additional, handwritten comments on 18 surveys (8%) (Appendix O). There were no rank ties in either section two or three.

Because the purpose of this survey was to compare the relationship between the choices of the

SMEs and the survey respondents the choices themselves are not of primary importance. What mattered was whether the SMEs and survey respondents agreed or disagreed in their ranking; the topics were incidental. A secondary or supplemental research project might concern itself with the specific priority items and differences. This would be especially useful as an educational goal for a prevention and education bureau member.

Slightly more than half, or 53 (56.4%) of the survey respondents indicated that neither they nor a family member had used any type of EMS in the last five years (Appendix P). There may be a statistical significance in how this relates to the overall responses and their ranks. A correlation test between those who had used EMS in the last five years and those who had not could have been calculated as a further validation. I do not feel this is a limitation or a fatal error because it would have been a comparison between respondents and not respondents and SMEs.

Statistical Comparison

The Spearman's rho correlation test result for section two was 0.72. This indicates a positive and statistically significant relationship between the SMEs ranked responses and those of the survey respondents (See Table One).

Table One
Spearman's rho Correlation for Questionnaire and Survey Section Two

		SMES	SURVEY
SMES	Correlation Coefficient	1.00	.72 **
	Sig. (2-tailed)	.	.00
	N	14	14
SURVEY	Correlation Coefficient	.72**	1.00
	Sig. (2-tailed)	.004	.
	N	14	14

** Correlation is significant at the .01 level (2-tailed).
(SPSS Bivariate Correlation Table)

The Spearman's rho correlation test result for section three was not statistically significant. This indicates no statistically significant relationship between the SMEs ranked responses and those of the survey respondents (See Table Two).

Table Two
Spearman's rho Correlation for Questionnaire and Survey Section Three

		SMES	SURVEY
SMES	Correlation Coefficient	1.00	.00
	Sig. (2-tailed)	.	1.00
	N	5	5
SURVEY	Correlation Coefficient	.00	1.00
	Sig. (2-tailed)	1.00	.
	N	5	5

(SPSS Bivariate Correlation Table)

For readers wishing to view more data, statistical frequencies and descriptives for both the questionnaires and the surveys are included in Appendix N as Tables C and D. Scatter plots are included in Appendix N as Tables E and F. EMS use is included in Appendix N as Table G.

Even though the Spearman's rho test shows a correlation between the SMEs and the survey respondents for the second section (14 considerations), there is still a disagreement. The SMEs have basically placed the considerations into two tiers, while the survey respondents have placed them into three tiers. This can be seen by examining the ranking of the items (See Figures One and Two). The SMEs have two distinct patterns in ranking. The first seven items are ranked one each in 1st through 4th, and the next three are ranked in a tie for 5th. The last seven are the same, in the 8th rank position. The survey respondents basically agree with the SMEs in the first five items (there is a small difference in

the order of 1st, 2nd, and 3rd). But they place the middle items at the bottom, in ranks 10 through 14. Then, the last four items rank in the middle (a tie for 5th, then 7th, 8th, and 9th). In other words, the SME's consider the last seven considerations of equal importance, but the survey respondents place a higher, but not highest value on four of the last seven. Figures One and Two show the rank comparisons for sections Two and Three.

Figure One
Rank Comparison of Section Two Responses

Considerations in Providing EMS		
Consideration item(s)	SMEs Rank	Respondents Rank
Training	1	2
Quality of care	2	3
Response time	3	1
Good equipment	4	4
Dedication of personnel	5	5
Legal compliance/knowledge	5	10
On-going evaluation	5	11
Cost effective	8	12
Customer service	8	14
Educating the public	8	13
Motivated personnel	8	8
Professional delivery	8	9
State of the art services	8	5
Level of care	8	7

(Figure by author)

Figure Two
Rank Comparison of Section Three Responses

Differences in Municipal versus Private EMS		
Consideration item(s)	SMEs Rank	Respondents Rank
medical personnel are firefighters	1	4
fire department turnover is lower	2	2
firefighters are a part of community	3	1
fire departments are governed	4	3
private providers are for-profit	5	5

(Figure by author)

Adding this inference to the non-significant results of the Spearman's rho test for the third section (5 differences) indicates that the SMEs have not properly identified the needs and wants, and perceptions of their customers. While the Spearman's rho supports part of the hypothesis, this observation leads me to reject the hypothesis.

Interviews

It is ironic that both Mr. Wappel and Ms. Stotts agreed with the survey respondents about the unimportance of differences between municipal and private EMS providers. Neither person knew the survey results, nor had they reviewed any reports, studies, or statistics which would have helped them form their opinions. They knew from experience that the customer is not that concerned with differences. The customer just wants an ambulance when and where it is needed. This is a perfect example of where and how badly the public sector has failed to relate to its customers.

DISCUSSION

Organizational change is going to occur. Without exception, all the experts agree on this point. The literature review confirmed this. The interview with Mr. Wappel demonstrated that there are private firms ready to take over municipal service. The interview with Ms. Stotts confirmed that the regulatory agencies put the customer first, last, and always. The regulatory agencies do not care who provides EMS, as long as it serves the customer. The survey process identified how and where the municipal departments might have failed to meet the customers' needs and wants.

Sometimes the change will take the form of privatization. Though there are numerous theories and schools of change management and processes, the one common thread is that change happens. No organization is immune, be it private, not-for-profit, or public. Rather than viewing change as a task, an optional extra, or a thing, change managers and leaders should treat it as a process. The successful changes are those which are understood and facilitated by all levels of the organization.

There are two driving forces behind privatization as a change process: internal and external. Change also has internal and external effects. The internal effects are those felt by the employees; the external effects are felt by the customer. The change in Markham was internally driven by a mayoral mandate. It was ratified by a city council majority. But it affected both the fire department (internal) and the residents (external).

It would seem that there should be two key steps in utilizing privatization as a change process: recognizing a need for moving a service or business into the private sector and implementing a process that successfully facilitates this result. It is also important to remember that at the external level

communicating the need or reason for the change to the customer is necessary. This can be accomplished through: (A) Open communication, (B) Public hearings, (C) Public relations campaign(s), and (D) Public support by appointed and elected officials.

Internally, the organization has to ensure that all the employees both believe in the change and actively support it. As in any other management function, internal communication is the key to successful change. This can be accomplished by: (A) Setting quantitative goals, (B) Making sure communication is open and honest, especially with employees who are not in the inner circle, (C) Sharing the change mission as part of a successful plan, (D) Making sure each employee knows what they are expected to do relative to the change process, and (E) Encouraging feedback from all levels, not just management.

The results of the questionnaire describe what the SMEs consider the customer priorities to be in their EMS systems. These are the public service EMS benchmark standards. They should agree with, if not mirror the responses in the customers' surveys. While there is agreement in the top service priorities, there is absolutely none in the public perception of differences between municipal and private EMS providers. The same holds true when comparing what the SMEs consider as important differences between municipal and private EMS providers.

RECOMMENDATIONS

Change is ever present. There are three ways to deal with it: (A) reactive, (B) pro-active, and (C) cutting edge. The reactive fire department will be like Markham's. It will have a great rear-end view of what happened. It can play catch-up, hoping to remain a viable organization. The pro-active department will search out the customers' needs and wants. Armed with that information, it will strive to

meet them before any other entity even enters the picture. The cutting edge department will define such new horizons that the private, for-profit companies will be forced to become reactive.

Current EMS providers need to complete a needs analysis of their system's delivery. This should be primarily based on the needs and wants of those who matter most in EMS, the customer. This should be done before considering any type of change and before conducting any task analyses steps. EMS is a business. A business relies on its customers' needs and wants for its very existence. Ignoring those needs and wants is an invitation to losing that business.

One of the most important results of this project was not the identification of privatization as a change catalyst in municipal EMS. Rather, it was the statistically significant differences in priority and comparison identification between the EMS delivery system SMEs and the survey respondents. EMS and fire service leaders have to be aware of and respond to the wants and needs of the EMS customer, without prejudice. In other words, just because we provide the service does not mean we know what is best.

Another recommendation comes directly from the SMOC course (Dade County simulation exercise): cutting-edge EMS scope expansion. Rising health care costs and an increasing number of senior citizens have opened a window of opportunity for EMS system providers. Perhaps it is time to have our paramedics evolve into other pre-hospital areas like nurse practitioners and physician assistants. Managed health care is growing. Its purpose is to keep people out of the in-hospital system. If we, the municipal EMS providers, fail to find a way to address this issue from our customers' view then we will have opened another door for private providers.

One caveat to EMS providers . . . this project was limited in scope to the citizens of Markham,

Illinois. It is possible that the EMS priorities identified in their surveys may be geographically and socioeconomically unique. EMS change managers should complete a basic survey of their own customer base. This will allow them to set a legitimate foundation of EMS priorities and concerns for their service area(s).

It is painfully obvious that the public sector, especially from an EMS perspective, has to actively make some type of acknowledgment of the EMS customers' expectations and beliefs. This can be in either the management of change or the mission concept as a service profession. This requires a consonance between these beliefs in the relationship between the customer and the provider. The literature review demonstrated this philosophy. The evaluative method measured this relationship. The customers are speaking and the private providers are listening. The writing is on the wall. We just have to read it.

REFERENCES

- Brame, K. (1994, February). How to bid the private sector farewell. *Fire Chief*, 16-20.
- Barber, S. (1996, February). Privatisation (sic) of fire emergency services. *Fire International*, 150 (2): 13-15.
- Bolman, L. G. & Deal, T. E. 1997. *Reframing organizations: Artistry, choice, and leadership (2nd ed.)*. San Francisco: Jossey-Bass.
- Bottoms, D. (1995, May 1). Facing change or changing face? *Industry Week*, 244 (9): 17-19.
- Brame, K. (1994, February). How to bid the private sector farewell. *Fire Chief*, 38 (2): 16, 18, 20.
- Bruce, B. (1994, June). Bigger frogs, same pond. As the ambulance industry consolidates, how are field providers and patient care affected? *Emergency*, 26 (6): 32-5.
- Bryson, J. M. (1995). *Strategic planning for public and nonprofit organizations (2nd Ed.)*. San Francisco: Jossey-Bass.
- Clement, R. W. (1994). Culture, leadership, and power: The keys to organizational change. *Business Horizons*, 37 (1): 33-40.
- Condrey, S. E. (Ed.). (1998) *Handbook of human resource management in government*. San Francisco: Jossey-Bass.
- Crainer, S. (Ed.). (1995). *The financial times handbook of management*. London: Pitman Publishing.
- Denton, D. K. (1995). Creating a system for continuous improvement. *Business Horizons*, 38 (1): 16-21.

- Dierking, B. H. (1992, December). Privatization. *Emergency*, 24 (12): 12.
- Grosse, R. & Yañes, J. (1998). Carrying out a successful privatization: The YPF case. *Academy of Management Executive*, 12 (2): 51-63.
- Grunwald, H. (1992, March 30). Is it the end - - or just the beginning? *Time*, 73-5.
- Harrison, M. I. (1994). *Diagnosing Organizations: Methods, Models, and Processes* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Huisenga, D. (1996, May/June). The privatization of EMS: -what does it mean for the fire service? *Minnesota Fire Chief*, 32 (5): 14.
- Kearns, K. P. (1996). *Managing for accountability: Preserving the public trust in public and nonprofit organizations*. San Francisco: Jossey-Bass.
- Kiely, T. J. (1995, March-April). Managing change: why reengineering projects fail. *Harvard Business Review*, 73 (2): 15.
- Machiavelli, N. (1961). *The Prince*. New York: Penguin Books (Original work published in 1541).
- Mariotti, J. (1996, October 7). Troubled by resistance to change? Don't fight it. First, try to understand it. *Industry Week*, 245 (18): 30.
- Olson, C. H. (1990) *An analysis of the use of private ambulance companies versus a public fire department for the transportation of emergency medical victims*. Emmitsburg, Maryland: National Fire Academy, Executive Fire Officer Program.
- Pascale, R., Millemann, M., & Gioja, L. (1997). Changing the way we change. *Harvard Business Review*, 75 (6): 126-140.

Patton, C. V. & Sawicki, D. S. (1993). *Basic methods of policy analysis and planning (2nd ed.)*. Englewood Cliffs, NJ: Prentice Hall.

Perry, J. L. (Ed.) (1996). *Handbook of public administration (2nd ed.)*. San Francisco: Jossey-Bass.

Pynes, J. E. (1997). *Human resources management for public and nonprofit organizations*. San Francisco: Jossey-Bass.

Rea, L. M. & Parker, R. A. (1997). *Designing and conducting survey research (2nd ed.)*. San Francisco: Jossey-Bass.

Reissman, S. G. (1997, January-March). Privatization and emergency medical services. *Prehospital and Disaster Medicine*, 12 (1): 22-9.

Reynierse, J. H. (1994, January-February). Ten commandments for CEOs seeking organizational change. *Business Horizons*, 37 (1): 40-46.

Rudolph, B. (1991, April 22). A global fire sale. *Time*, 58.

Rusteen, J. (1995, January). Private provider tactics: Who's fooling whom? *Fire Engineering*, 148 (1): 121-22.

Sachs, G. M. (1996) *Private fire departments: They aren't so bad after all*. Emmitsburg, Maryland: National Fire Academy, Executive Fire Officer Program.

Sheridan, J. H. (1996, August 19). The winds of change. *Industry Week*, 245 (15): 58-64.

Slater, S. F. (1995). Learning to change. *Business Horizons*, 38 (6): 13-21.

Smith, D. K. (1996). *Taking charge of change: 10 principles for managing people and performance*. New York: Addison-Wesley Publishing.

SPSS Inc. (1998). *SPSS® Base 8.0 Applications Guide*. Chicago: Author.

Witte, R. S. & Witte, J. S. (1997). *Statistics (5th ed.)*. Fort Worth: Harcourt Brace.

APPENDICES A THROUGH O

Pages 39 through 74

for

**EMS PRIVATIZATION:
WHERE THE CUSTOMER COMES SECOND**

STRATEGIC MANAGEMENT OF CHANGE

**BY: H. Michael Drumm
City of Markham Fire Department
Markham, Illinois**

**An applied research project submitted to the National Fire Academy
as part of the Executive Fire Officer Program**

March 1999

The Mission of the City of Markham Fire Department

to provide a range of programs
designed to protect
the
Lives and Property
of the inhabitants of the
City of Markham
from the adverse effects of
Fires
Sudden Medical Emergencies
or exposure to
Dangerous Conditions
created by either
Man or Nature



SECTION 9.1

E.M.S. DIVISION

The primary function and responsibility of the E.M.S. Division is to provide initial emergency medical service and transportation of the sick and injured. E.M.S. Division personnel also provide "in-service" training of firefighter personnel, both during the initial phase of such training and through continuing programs aimed at more advanced certification.

This Division is supervised by the Emergency medical Service Officer and is staffed by EMT-D's and emergency medical technicians and other personnel as may be necessary for the efficient operation of the department.

The Emergency Medical Service Officer is responsible to the First Deputy Chief for the efficient and coordinated staff operation of this Division.

All E.M.S. Division personnel will function under the Rules and Regulations of the Illinois Pre-Hospital Emergency Medical Services Act and the Rules and Regulations of the Illinois Department of Public Health. They will also function according to the Standards, Rules and Regulations of the South Cook County Emergency Medical Service System (Ingalls Memorial Hospital).

E.M.S. personnel must maintain medical status at all times during their employment with this Department as outlined below:

- * Full time employees hired as of 4/1/87 - EMT-D
- * Part time employees hired as of 9/1/91 - EMT-A

The E.M.S. Officer shall be appointed by the Fire Chief as an assignment. The E.M.S. Officer must be fully certified at the level of EMT-I at the "D" level according to the requirements of the State of Illinois as stated above for all E.M.S. personnel.

POLICIES AND PROCEDURES

RESPONSIBILITIES OF E.M.S. OFFICER

1. Collects and compiles any statistical data required by the resource hospital and submits according to provider's ability.
2. Maintains and updates all provider agency EMT-A, EMT-I and EMT-D files on certification, recertification and continuing education reports information to the resource hospital as necessary.
3. Arrange assistance for continuing education or community activity with EMS staff of the resource hospital.
4. Maintains open communications with EMS office staff and provider agency personnel and assists in problem solving as requested.

Chicago Sun-Times Wednesday, May 7, 1997

29

METRO

Ambulance revamp likely

BY PHILIP FRANCHINE
SUBURBAN REPORTER

The city of Markham plans to scrap its ambulance service in favor of a private contractor that is expected to force residents to pay \$325 or more per ride that they have routinely ignored, officials said.

The city council will vote tonight on a proposal by Mayor Evans Miller to sign a four-year contract with CoMed of Dolton, also known as Consolidated Medical Transport Daley's Ambulance Division. Miller said the cost-cutting proposal is supported by a majority of council members.

Ald. Jack Genius criticized the plan, saying: "I don't think elderly people, and we have many, can afford an ambulance service by a private contractor. There are many other places to cut costs."

Miller said the city would give CoMed two ambulances in exchange for a year's free service, followed by three years at \$65,000 a year.

After the first year CoMed would charge for rides and probably would pursue nonpayers through collection agencies, Miller said.

The city sends out bills now, Miller said, but it doesn't pursue residents or insurers who don't pay.

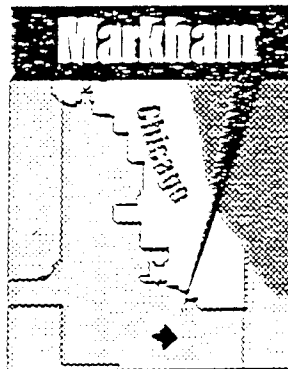
Miller said the private service would charge patients the same amount the city's fire department charges now.

Neither Markham Fire Chief Dennis Drumm nor a CoMed spokesman could be

reached for comment.

Miller said the change would cut \$150,000 to \$200,000 from the \$775,000 fire department budget. Some of the savings would be used to hire one or two firefighters, he said.

If the ambulance service is privatized, Markham will forfeit \$87,000 in federal money earmarked for a new ambulance, said Suzanne Hayes, assistant planning director for the Cook County bureau of administration.



FILE COPY
COMED
COPY FOR YOUR
INFORMATION

Notice to Markham Residents

June 18, 1997

Starting Thursday, June 19th, CoMed Ambulance (Daley's) will be responding to ambulance calls and medical emergencies for the City of Markham. This change is being made to improve the level of emergency medical service currently offered to Markham residents. It will also help the City save over \$100,000.00 per year.

Requests for an ambulance will still be handled by the Markham Emergency Services Dispatch Center. Any resident needing an ambulance will still dial "9-1-1."

CoMed Ambulance was founded in 1950 as Daley's Ambulance. They have over 100 ambulances, staffed by more than 800 medical personnel. CoMed handles over 125,000 emergency medical responses a year. They currently serve thirteen communities including Dolton, Harvey, Thornton, Robbins, Tinley Park, Riverdale and Glenwood.

CITIZENS OF MARKHAM WE NEED YOUR HELP

THE MARKHAM PROFESSIONAL FIREFIGHTERS ASSOCIATION LOCAL 3209 WISHES TO ALERT YOU ABOUT A MATTER CURRENTLY UNDER CONSIDERATION BY THE MAYOR AS INDICATED IN THE STAR TRIBUNE DATED SUNDAY APRIL 20TH.

THE AMBULANCE SERVICE THAT IS CURRENTLY BEING PROVIDED BY THE MARKHAM FIRE DEPARTMENT IS NOW BEING CONSIDERED TO BE CONTRACTED OUT BY A PRIVATE AMBULANCE SERVICE WITH THE COST BEING PASSED ON TO YOU! A COST OF WHICH WILL AVERAGE HUNDREDS OF DOLLARS THAT YOU WILL BE HELD ACCOUNTABLE FOR.

THE PRIMARY REASON FOR THIS IS ECONOMICS. THE CITY WISHES TO BALANCE OR PARTIALLY BALANCE THE BUDGET AS ALWAYS ON THE BACKS OF THE FIRE DEPARTMENT. THE CITY IS CURRENTLY SUBSIDIZING THE FIRE DEPARTMENT BY APPROXIMATELY \$375,000.00. WHICH THEY FEEL IS TOO MUCH FOR QUALIFIED AMBULANCE AND FIRE PROTECTION. THEY HAVE REDUCED OUR MINIMUM MANNING FROM 4 FULLTIME MEMBERS PER DAY TO 3 FULLTIME MEMBERS PER DAY. AND AS OF LATE THEY HAVE ELIMINATED ALL BUT 4 PARTTIME MEMBERS. THIS IS THE ONLY DEPARTMENT THAT THE CITY HAS CUT AT THIS TIME JEOPARDIZING THE WELFARE AND SAFETY OF ITS CITIZENS. BELOW ARE SOME OF THE PROS AND CONS OF HAVING A PRIVATE AMBULANCE SERVICE.

PRIVATE AMBULANCE CO.

MARKHAM FIRE DEPT.

THEIR EMPLOYEES CAN STRIKE

BY LAW WE CAN'T

IF THEY GET INJURED IN YOUR HOME THEY CAN SUE YOU

WE CANNOT SUE IF INJURED IN YOUR HOME

REGARDLESS OF BACKGROUND THEY CAN HIRE ANYONE

WE HAVE BACKGROUND CHECKS AND PHYSIOLOGICAL EXAMS

HIGH TURNOVER RATE

CAREER MINDED PROFESSIONALS

NO AUTHORITY IN DISCIPLINARY ACTION

GOVERNED BY COMMISSION BOARD

OUTSIDE COMPANY CAN WITHDRAW SERVICES WHEN THE CITY DOES NOT MEET THEIR AGREEMENTS (THIS HAS HAPPENED IN THE PAST)

FIREFIGHTERS HAVE CONTRACTUAL OBLIGATION AND HAVE SWORN AN OATH TO SERVE THE CITIZENS OF MARKHAM

BEING NOT SOLELY COMMITTED TO MARKHAM AMBULANCES MAY RESPOND FROM OTHER TOWNS

REDUCED ARRIVAL TIMES BETTER KNOWLEDGE OF STREETS RESPONDING FROM TOWN

OTHER QUESTIONS THAT CAN BE ASKED:

* HOW WILL THE CONTRACT BE SUPERVISED?

* ARE THE EMPLOYEES TRAINED IN INCIDENT COMMAND & HAZARDOUS MATERIALS AWARENESS, SCBA CERTIFIED AND MEDICALLY MONITORED ? IF NOT WHO WILL PAY FOR THIS TRAINING?

* WHAT INPUT WILL THE CITY HAVE IN HIRING, FIRING, DISCIPLINE, AND DISCHARGE OF CONTRACTOR'S EMPLOYEES?

MANY MORE QUESTIONS NEED TO BE ASKED

SHOW YOUR SUPPORT BY COMING TO THE CITY

**SURVEY DEVELOPMENT QUESTIONNAIRE
STRATEGIC MANAGEMENT OF CHANGE
EXECUTIVE FIRE OFFICER PROGRAM
NATIONAL FIRE ACADEMY**

I have identified you as a "Subject Matter Expert" because of your successful completion of the *Advanced Leadership Issues in Emergency Medical Services* course at the National Fire Academy. Please complete this questionnaire and return it in the enclosed, postage-paid envelope no later than September 15, 1998. Thank you.

Statement of confidentiality: Your questionnaire answers will not be identified in any way by code or other individual marking. They will be collated and printed in statistical, graph, and information form in the procedures, results, and appendices of an applied research project. The results will be used to generate a survey for the effects of privatization of EMS on the customer.

1. Please provide your current rank/title _____
2. How many years in this rank/position _____
3. How many years with your current department _____
4. How many total years of Fire/EMS service _____
5. Are you career, part-time, volunteer, or other (specify) _____
6. Please list your annual EMS call volume _____
7. Is your organization's emergency EMS:

a. All municipal _____	d. BLS _____
b. All private _____	e. ILS _____
c. Combination _____	f. ALS _____
8. In your personal and professional opinion, please list the five most important considerations in providing emergency EMS response/care:
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

(Please turn over and complete other side)

1. _____
2. _____
3. _____
4. _____
5. _____

10. Would you like a copy of:

1. The results from this questionnaire _____
2. The survey developed from the results _____
3. The results from the survey _____

(if yes, please provide your name: _____)

Please make any special notes or comments in the are below. If you are commenting on a specific question, please address it by number.

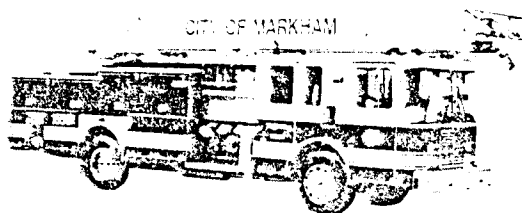
[illegible]

**CITY OF MARKHAM
FIRE DEPARTMENT**

16313 Kedzie Parkway
Markham, IL 60426

Evans R. Miller
Mayor

H. Michael Drumm
Fire Chief



Administrative Office
(708) 331-4905 - Ext. 240
Fax
(708) 331-3758

COMMITMENT TO EXCELLENCE

Rose M. Ketchum
Administrative Assistant

Roger A. Agpawa
Captain
Prevention Bureau

John T. Donovan
Senior Lieutenant
Administration

George W. Hopman
Captain
Arson Bureau

Norman V. Anderson
Lieutenant

Ronald Moaton
Lieutenant

Scott Adams
Chief Engineer

Roman E. Nieckula
Captain POC's

I.A.F.F.

I.A.B.P.F.F.


August 28, 1998

I am currently enrolled in the Executive Fire Officer Program at the National Fire Academy. I just completed the second year's course, *The Strategic Management of Change* (SMOC). Part of my requirement for entering the third year of the program is the successful completion of an applied research project. The project must involve a change at my department. Because my City Council privatized our EMS services last year, I have chosen to research the impact this action has had on the end user, the customer.

To facilitate this I am developing an EMS survey for fire departments and EMS customers. I would like you to help me develop this survey by completing the enclosed questionnaire. Please take a few minutes and answer the questions based on your personal and professional opinion. I am going to use your answers to create the survey questions. I also hope to use this project as a baseline for re-attaining the EMS service.

I have enclosed a self-addressed stamped envelope. Please feel free to write any additional comments you may have on the questionnaire. You may call me at (708) 331-4905 extension 252.

Thank you,


H. Michael Drumm
Fire Chief



**Emergency Medical Service Survey
City of Markham Fire Department
Markham, Illinois
November 1998**

This survey was developed as part of a study of emergency medical services as currently provided in the City of Markham. In June of 1997 CoMed became the primary provider of emergency paramedic and ambulance service for the City of Markham. Previously, this service was provided by the fire department.

In order to ensure that the citizens of Markham receive the best quality of emergency medical services, I would appreciate if you would take a few minutes and complete this survey. By doing this, you will help us to identify some areas of importance you have when a medical emergency occurs. Please complete the survey and return it in the enclosed self addressed, stamped envelope by November 30th. There are questions on both sides of this sheet.

This survey is completely confidential. Your answers will not be identified in any way. They will be collated and grouped in a statistical and information form as part of an applied research project. Please feel free to write any comments you have in the comment section at the end. You can contact me by phone at the fire department, (708) 331-4905, extension 252.

Thank you,

H. Michael Drumm
Fire Chief

Please check the statement that is most appropriate (you may check more than one):

- _____ I, or a member of my household, **have** used the ambulance/paramedic service provided by the City of Markham in the last three years.
- _____ I, or a member of my household, **have** been a patient in an emergency ambulance provided by another fire department in the last three years.
- _____ I, or a member of my household, **have** been a patient in an emergency ambulance provided by a private company (CoMed, Trace, AMR) in the last three years.
- _____ I, or a member of my household, **have not** used the ambulance/paramedic service provided by the City of Markham in the last three years.
- _____ I, or a member of my household, **have not** used or been a patient in any emergency ambulance/paramedic service in the last three years.

(OVER)

Please consider each of these fourteen emergency medical service qualities and circle the number which best describes how important **you** feel each item is.

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- | | | | | | |
|-----|--|---|---|---|---|
| 1. | Frequency of medical training | ① | ② | ③ | ④ |
| 2. | Quality of patient care | ① | ② | ③ | ④ |
| 3. | Response time | ① | ② | ③ | ④ |
| 4. | Quality of equipment | ① | ② | ③ | ④ |
| 5. | Professional dedication of personnel | ① | ② | ③ | ④ |
| 6. | Knowledge of emergency medical laws | ① | ② | ③ | ④ |
| 7. | Internal evaluation of service quality | ① | ② | ③ | ④ |
| 8. | Cost effective for fire departments | ① | ② | ③ | ④ |
| 9. | Customer service quality surveys | ① | ② | ③ | ④ |
| 10. | Educating the public about the service | ① | ② | ③ | ④ |
| 11. | Motivated personnel | ① | ② | ③ | ④ |
| 12. | Professionally delivered services | ① | ② | ③ | ④ |
| 13. | Newest technology and equipment | ① | ② | ③ | ④ |
| 14. | Level of medical care provided | ① | ② | ③ | ④ |

Each of these questions are about personnel who are members of a fire department as compared to employees of private ambulance companies. Please circle the number which best describes how important **you** feel each item is.

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- | | | | | | |
|----|--|---|---|---|---|
| 1. | That the medical personnel are also firefighters | ① | ② | ③ | ④ |
| 2. | That fire department personnel turnover is lower | ① | ② | ③ | ④ |
| 3. | That firefighters are a part of the community | ① | ② | ③ | ④ |
| 4. | That fire departments are governed by the city | ① | ② | ③ | ④ |
| 5. | That ambulance companies are for-profit businesses | ① | ② | ③ | ④ |

comments: _____

Questionnaire/Survey Time-Line Matrix

DATE	ACTION DESCRIPTION
08/22/98	Developed SME cover letter and questionnaire
08/27/98	Revised questionnaire per recommendations
08/28/98	Mailed 22 questionnaires and cover letters to ALIEMS class members
09/03/98	Received first two completed questionnaires
09/30/98	Received 18th and final completed questionnaire
10/05/98	Developed first draft of survey
10/10/98	Revised survey per recommendations
10/15/98	Survey tested by Country Club Hills Fire Department, 13 of 20 returned
10/15/98	Survey tested by Libertyville Fire Department, invalidated all
10/18/98	Survey retested by Libertyville Fire Department, 20 of 20 returned
10/18/98	Survey tested by Monee Fire Department, 9 of 20 returned
10/20/98	Revised questions 7, 8, 9, 12, 13, 14 in section Two and question 5 in Section Three based on comments of survey test results
10/25/98	Completed random selection and data entry of mailing list
10/30/98	Mailed 250 surveys to Markham residents
11/09/98	Received first two completed surveys
11/13/98	Mailed reminder postcard to all 250 survey recipients; 39 completed surveys received at this point
12/05/98	Received 94th and last completed survey

DRAFT

Emergency Medical Service Survey City of Markham Fire Department Markham, Illinois

Snacks

This survey was developed as part of a study ^{of} emergency medical services as they are currently provided in the City of Markham. In June of 1997, CoMed became the primary provider of emergency paramedic and ambulance service for the City of Markham. Previously, this service was provided by the fire department.

In order to ensure that the citizens of Markham receive the best quality of emergency medical services, I would ask you to take a few minutes and complete this survey. By doing this, you will help us to identify some of the areas of importance and concern you have when a medical emergency occurs. Please complete the survey and return it in the enclosed self addressed, stamped envelope by November 21st. There are questions on both sides of this sheet. *(Hander for you to code - single sided is easier)*

This survey is completely anonymous. Your answers will not be identified in any way. They will be collated and grouped in a statistical and information form as part of an applied research project. Please feel free to write any comments you have in the comment section at the end. You can contact me by phone at the fire department, (708) 331-4905, extension 252.

Thank you,

H. Michael Drumm
Fire Chief

Please check the statement that is most appropriate (you may check more than one):

- ☐ I, or a member of my household, have **not** used the ambulance/paramedic service provided by the City of Markham in the last three years.
- ☐ I, or a member of my household, have used the ambulance/paramedic service provided by the City of Markham in the last three years.
- ☐ I, or a member of my household, have been a patient in an emergency ambulance provided by another fire department in the last three years.
- ☐ I, or a member of my household, have been a patient in an emergency ambulance provided by a private company (CoMed, Trace, AMR) in the last three years.

(OVER)

Fourteen emergency medical service consideration factors are listed below. These are qualities of the personnel responding to the request for an ambulance. Please consider each item individually and circle the corresponding number which best describes how important you feel each item is.

DRAFT

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- S. Anderson*
- | | | | | |
|--|---|---|---|---|
| 1. Frequency of training | ① | ② | ③ | ④ |
| 2. Quality of patient care | ① | ② | ③ | ④ |
| 3. Response time | ① | ② | ③ | ④ |
| 4. Quality of equipment | ① | ② | ③ | ④ |
| 5. Dedication of personnel | ① | ② | ③ | ④ |
| 6. Legal knowledge and compliance <i>where?</i> | ① | ② | ③ | ④ |
| 7. On-going evaluation of services <i>where?</i> | ① | ② | ③ | ④ |
| 8. Cost effective for the service provider | ① | ② | ③ | ④ |
| 9. Customer service quality | ① | ② | ③ | ④ |
| 10. Educating the public about the service | ① | ② | ③ | ④ |
| 11. Motivated personnel | ① | ② | ③ | ④ |
| 12. Professional delivery of services | ① | ② | ③ | ④ |
| 13. State of the art techniques and services | ① | ② | ③ | ④ |
| 14. <i>with</i> Medical level of care provided | ① | ② | ③ | ④ |

These questions address some of the areas of concern regarding the differences in personnel who are members of a fire department providing emergency medical services as opposed to employees of private providers. Please consider each item individually and circle the corresponding number which best describes how you rate each item.

- important services*
SAME SOURCE AS ABOVE
- | | | | | |
|---|---|---|---|---|
| 1. <i>That</i> The medical personnel are also firefighters | ① | ② | ③ | ④ |
| 2. <i>That</i> Fire department turnover is usually lower | ① | ② | ③ | ④ |
| 3. <i>That</i> Firefighters are a part of the community <i>(live in it)</i> | ① | ② | ③ | ④ |
| 4. <i>That</i> Fire departments are controlled by the city <i>which is better</i> | ① | ② | ③ | ④ |
| 5. <i>That</i> Private providers are a business, not a service | ① | ② | ③ | ④ |

7

comments: _____

DRAFT

Emergency Medical Service Survey City of Markham Fire Department Markham, Illinois

Markham? on our file

This survey was developed as part of a study on emergency medical services as they are currently provided in the City of Markham. In June of 1997 CoMed became the primary provider of emergency paramedic and ambulance service for the City of Markham. Previously, this service was provided by the fire department.

? would appreciate? ? please take a few min... ? please

In order to ensure that the citizens of Markham receive the best quality of emergency medical services, I would ask you to take a few minutes and complete this survey. By doing this, you will help us to identify some of the areas of importance and concern you have when a medical emergency occurs. Please complete the survey and return it in the enclosed self addressed, stamped envelope by November 21st. There are questions on both sides of this sheet. *→ when say, better say you*

This survey is completely anonymous. Your answers will not be identified in any way. They will be collated and grouped in a statistical and information form as part of an applied research project. Please feel free to write any comments you have in the comment section at the end. You can contact me by phone at the fire department, (708) 331-4905, extension 252.

Thank you,

→ why? if you have any questions?

H. Michael Drumm
Fire Chief

Please check the statement that is most appropriate (you may check more than one):

- ☐ I, or a member of my household, have **not** used the ambulance/paramedic service provided by the City of Markham in the last three years.
- ☐ I, or a member of my household, have used the ambulance/paramedic service provided by the City of Markham in the last three years. *used?*
- ☐ I, or a member of my household, have been a patient in an emergency ambulance provided by another fire department in the last three years.
- ☐ I, or a member of my household, have been a patient in an emergency ambulance provided by a private company (CoMed, Trace, AMR) in the last three years.

(OVER)

Fourteen emergency medical service consideration factors are listed below. These are qualities of the personnel responding to the request for an ambulance. Please consider each item individually and circle the corresponding number which best describes how important you feel each item is.

DRAFT

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- | | | | | |
|---|---|---|---|---|
| 1. Frequency of training | ① | ② | ③ | ④ |
| 2. Quality of patient care | ① | ② | ③ | ④ |
| 3. Response time | ① | ② | ③ | ④ |
| 4. Quality of equipment | ① | ② | ③ | ④ |
| 5. Dedication of personnel <i>green</i> | ① | ② | ③ | ④ |
| 6. Legal knowledge and compliance | ① | ② | ③ | ④ |
| 7. On-going evaluation of services | ① | ② | ③ | ④ |
| 8. Cost effective for the <u>service provider</u> | ① | ② | ③ | ④ |
| 9. Customer service quality | ① | ② | ③ | ④ |
| 10. Educating the public about the service | ① | ② | ③ | ④ |
| 11. Motivated personnel | ① | ② | ③ | ④ |
| 12. Professional delivery of services | ① | ② | ③ | ④ |
| 13. State of the art techniques and services | ① | ② | ③ | ④ |
| 14. Medical level of care provided | ① | ② | ③ | ④ |

These questions address some of the areas of concern regarding the differences in personnel who are members of a fire department providing emergency medical services as *compared* ~~opposed to~~ employees of private providers. Please consider each item individually and circle the corresponding number which best describes how you rate each item.

- | | | | | |
|---|---|---|---|---|
| 1. The medical personnel are also firefighters | ① | ② | ③ | ④ |
| 2. Fire department turnover is usually lower | ① | ② | ③ | ④ |
| 3. Firefighters are a part of the community | ① | ② | ③ | ④ |
| 4. Fire departments are controlled by the city <i>animal</i> | ① | ② | ③ | ④ |
| 5. Private providers are a business, not a service <i>provide a service, for profit</i> | ① | ② | ③ | ④ |

comments: _____

Please consider each of these fourteen emergency medical service qualities and circle the number which best describes how important **you** feel each item is.

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

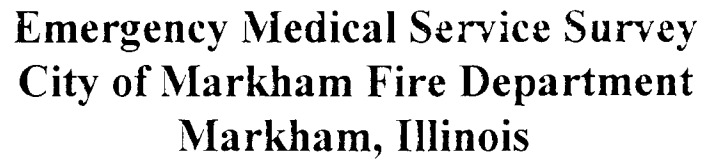
- | | | | | | |
|-----|--|---|---|---|---|
| 1. | Frequency of medical training | ① | ② | ③ | ④ |
| 2. | Quality of patient care | ① | ② | ③ | ④ |
| 3. | Response time | ① | ② | ③ | ④ |
| 4. | Quality of equipment | ① | ② | ③ | ④ |
| 5. | Professional dedication of personnel | ① | ② | ③ | ④ |
| 6. | Knowledge of emergency medical laws | ① | ② | ③ | ④ |
| 7. | Internal evaluation of service quality | ① | ② | ③ | ④ |
| 8. | Cost effective for fire departments | ① | ② | ③ | ④ |
| 9. | Customer service quality surveys | ① | ② | ③ | ④ |
| 10. | Educating the public about the service | ① | ② | ③ | ④ |
| 11. | Motivated personnel | ① | ② | ③ | ④ |
| 12. | Professionally delivered services | ① | ② | ③ | ④ |
| 13. | Newest technology and equipment | ① | ② | ③ | ④ |
| 14. | Level of medical care provided | ① | ② | ③ | ④ |

Each of these questions are about personnel who are members of a fire department as compared to employees of private ambulance companies. Please circle the number which best describes how important **you** feel each item is.

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- | | | | | | |
|----|--|---|---|---|---|
| 1. | That the medical personnel are also firefighters | ① | ② | ③ | ④ |
| 2. | That fire department personnel turnover is lower | ① | ② | ③ | ④ |
| 3. | That firefighters are a part of the community | ① | ② | ③ | ④ |
| 4. | That fire departments are governed by the city | ① | ② | ③ | ④ |
| 5. | That ambulance companies are for-profit businesses | ① | ② | ③ | ④ |

comments: _____



10/19/98

If you have a problem understanding or answering a question, write the question number and the reason why below. Try to include a solution or change for the problem you encountered. Identify the first fourteen questions as set **A** and the subsequent five as set **B**.

[illegible]



Emergency Medical Service Survey
City of Markham Fire Department
Markham, Illinois
October/November 1998

This survey was developed as part of a study of emergency medical services as currently provided in the City of Markham. In June of 1997 CoMed became the primary provider of emergency paramedic and ambulance service for the City of Markham. Previously, this service was provided by the fire department.

In order to ensure that the citizens of Markham receive the best quality of emergency medical services, I would appreciate if you would take a few minutes and complete this survey. By doing this, you will help us to identify some areas of importance you have when a medical emergency occurs. Please complete the survey and return it in the enclosed self addressed, stamped envelope by November 21st. There are questions on both sides of this sheet.

This survey is completely confidential. Your answers will not be identified in any way. They will be collated and grouped in a statistical and information form as part of an applied research project. Please feel free to write any comments you have in the comment section at the end. You can contact me by phone at the fire department, (708) 331-4905, extension 252.

Thank you,

H. Michael Drumm
Fire Chief

Please check the statement that is most appropriate (you may check more than one):

- _____ I, or a member of my household, **have** used the ambulance/paramedic service provided by the City of Markham in the last three years.
- _____ I, or a member of my household, **have** been a patient in an emergency ambulance provided by another fire department in the last three years.
- _____ I, or a member of my household, **have** been a patient in an emergency ambulance provided by a private company (CoMed, Trace, AMR) in the last three years.
- _____ I, or a member of my household, **have not** used the ambulance/paramedic service provided by the City of Markham in the last three years.
- _____ I, or a member of my household, **have not** used or been a patient in any emergency ambulance/paramedic service in the last three years.

(OVER)

Fourteen emergency medical service factors are listed below. These are qualities or traits of the ambulance personnel, ambulance company, or fire department responding with an ambulance. Please consider each item individually and circle the corresponding number which best describes how important you feel each item is.

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- | | | | | |
|--|---|---|---|---|
| 1. Frequency of medical training | ① | ② | ③ | ④ |
| 2. Quality of patient care | ① | ② | ③ | ④ |
| 3. Response time | ① | ② | ③ | ④ |
| 4. Quality of equipment | ① | ② | ③ | ④ |
| 5. Professional dedication of personnel | ① | ② | ③ | ④ |
| 6. Knowledge of emergency medical laws | ① | ② | ③ | ④ |
| 7. On-going evaluation of service quality | ① | ② | ③ | ④ |
| 8. Cost effective for the company or fire department | ① | ② | ③ | ④ |
| 9. Customer service quality | ① | ② | ③ | ④ |
| 10. Educating the public about the service | ① | ② | ③ | ④ |
| 11. Motivated personnel | ① | ② | ③ | ④ |
| 12. Professional delivery of services | ① | ② | ③ | ④ |
| 13. State of the art techniques and services | ① | ② | ③ | ④ |
| 14. Medical level of care provided | ① | ② | ③ | ④ |

TEST
GROUP

These questions are about the differences in personnel who are members of a fire department as compared to employees of private ambulance companies. Please consider each item individually and circle the corresponding number which best describes how important you feel each item is.

① = Very Important ② = Important ③ = Somewhat Important ④ = Not Important

- | | | | | |
|---|---|---|---|---|
| 1. That the medical personnel are also firefighters | ① | ② | ③ | ④ |
| 2. That fire department turnover is usually lower | ① | ② | ③ | ④ |
| 3. That firefighters are a part of the community | ① | ② | ③ | ④ |
| 4. That fire departments are governed by the city | ① | ② | ③ | ④ |
| 5. That ambulance companies are profit businesses | ① | ② | ③ | ④ |

comments: _____

Survey Test Groups Comments for
Question Revision

RETURN #	SECTION	QUESTION	COMMENT
1-01	2	1	Does the customer really take this into consideration when filling out a survey?
		5	How does the customer judge this . . . or is it just their opinion you're looking for?
		6	Does the customer have a solid knowledge of medical law or just an idea? Could this lead you to a false conclusion on your survey?
		7	Wordy? Unsure of your intent.
		9	Similar? To #7
		13	Can the customer make a good judgement on this item?
	3	1 through 5	As a survey instrument. I find subject B much easier to understand as a customer. Section Two has many questions that would tend to confuse the customer as to the intent which lead them to not want to complete the survey or give inaccurate results.
1-02	2	7 and 9	Are the same.
1-03	2	7, 9, and 12	Are repetitive questions.
1-04	2	7, 9, and 12	repetitive
1-05	2	14	Would the public know the difference between basic and advanced?
	3	2	"Usually" might make public believe that this number might be higher at the fire department.
1-20			No comments, seems good.
1-19	2	8	Misleading- what does this mean? An ambulance company or personnel not responding is more cost effective or less cost effective. What does cost effective mean?
1-18	2	14	Medical level of care provided change to - level of medical care provided.
1-17	2	8	Is this service cost effective for the fire department?
		14	Level of medical care provided.
1-16			Ok, sorta slated against pvt ambulance companies.
1-12	2	7 and 9	Same as?

Survey Test Groups Comments for
Question Revision
continued

RETURN #	SECTION	QUESTION	COMMENT
1-12	2	11	Motivation of personnel?
1-11	2	7 and 9	Asking the same thing.
1-18	2	14	Medical level of care provided change to - level of medical care provided.
1-17	2	8	Is this service cost effective for the fire department?
		14	Level of medical care provided.
1-16			Ok. sorta slated against pvt ambulance companies.
1-12	2	7 and 9	Same as?

Sample of Reminder Postcard

A few days ago you received an emergency medical services survey in the mail from the City of Markham Fire Department. If you have already completed and returned the survey, thank you very much for your time. If not, won't you please take a minute to complete it and mail it back to us? This survey is part of a study on what you, the resident of Markham, feel is important in the emergency medical services we provide. Thank you.

Tables of Results and Data

Table A

Survey Development Questionnaire
 Question # 8 Frequency Tabulation
 Responses Used in Survey

selection criteria: frequency of response ≥ 3

Five Considerations in Providing EMS					
Consideration	Frequency	Rank	Survey	Survey Section	Survey Question #
Training	9	1	yes	2	1
Quality of care	8	2	yes	2	2
Response time	7	3	yes	2	3
Good equipment	5	4	yes	2	4
Dedication of personnel	4	5	yes	2	5
Legal compliance/knowledge	4		yes	2	6
On-going evaluation	4		yes	2	7
Cost effective	3	8	yes	2	8
Customer service	3		yes	2	9
Educating the public	3		yes	2	10
Motivated personnel	3		yes	2	11
Professional delivery	3		yes	2	12
State of the art services	3		yes	2	13
Level of care	3		yes	2	14

Table A
(continued)

Survey Development Questionnaire
Question # 8 Frequency Tabulation
Responses Not Used in Survey

selection criteria: frequency of response ≤ 2

Five Considerations in Providing EMS Response/Care			
Consideration	Frequency	Rank	Survey
Patient care	2	15	no
Managed health care	2		no
Expanded scope of practice	2		no
Continuity of care	2		no
Quality personnel	2		no
Meeting customer expectations	2		no
Experienced management team	2		no
Dispatch triage	2		no
Personnel safety	1	23	no
Medical oversight	1		no
Availability	1		no
Field training of officers	1		no
Competition from private industry	1		no
System status management	1		no
Performance standards	1		no
Alternate funding	1		no
Budget allocations	1		no
Relations with resource hospital	1		no
Department liability	1		no
Data based decision making	1		no

Table B

Survey Development Questionnaire
 Question # 9 Frequency Tabulation
 Responses Used in Survey

selection criteria: frequency of response ≥ 6

Areas Lacking in Effect or Absent in Private Carrier EMS				
Areas	Frequency	Rank	Survey Section	Survey Question #
Job variation/cross trained	7	1	3	1
Vested interest in community	7		3	3
Run as business not service	6	3	3	5
Lower employee turnover	6		3	2
Local government control	6		3	4

Table B
(Continued)

Survey Development Questionnaire
Question # 9 Frequency Tabulation
Responses Not Used in Survey

selection criteria: frequency of response ≤ 5

Areas Lacking in Effect or Absent in Private Carrier EMS		
Areas	Frequency	Rank
Level of training/experience	5	6
Customer service	4	7
Response times	3	8
Cost effective service/economics	3	
Integrated prevention/safety programs	2	10
Stability of provider	2	
Continuum of care	2	
Unbiased care	2	
Suitability of fire service for EMS	2	
Quality of care	2	
Established response areas	2	
Public information access	1	17
Public relations	1	
Advancement for personnel	1	
Hazardous incidents	1	
Personnel safety issues	1	
Quality of equipment	1	
Vendor responsibility	1	
Guaranteed responders	1	
Established facilities and equipment	1	

Completed Questionnaires Frequencies

Statistics

		years in current rank	years with current department	years of total service	responder type	annual ems call volume
N	Valid	18	18	18	18	16
	Missing	0	0	0	0	2
Mean		6.61	12.11	19.28	1.3333	103,785.94
Median		6.00	13.00	18.50	1.0000	3,700.00
Mode		3	16	13 ^a	1.00	1,500
Std. Deviation		4.97	6.60	7.12	.7670	372,737.31
Variance		24.72	43.52	50.68	.5882	1.389E+11
Minimum		0	0	8	1.00	0
Maximum		21	22	34	3.00	1,500,000
Sum		119	218	347	24.00	1,660,575
Percentiles	25	3.00	6.75	13.75	1.0000	1,500.00
	50	6.00	13.00	18.50	1.0000	3,700.00
	75	10.00	16.25	25.25	1.0000	13,250.00

Statistics

		ems type	ems level
N	Valid	16	18
	Missing	2	0
Mean		1.38	2.89
Median		1.00	3.00
Mode		1	3
Std. Deviation		.81	.47
Variance		.65	.22
Minimum		1	1
Maximum		3	3
Sum		22	52
Percentiles	25	1.00	3.00
	50	1.00	3.00
	75	1.00	3.00

a. Multiple modes exist. The smallest value is shown

Completed Questionnaires Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
years with current department	18	0	22	12.11	6.60
years of total service	18	8	34	19.28	7.12
responder type	18	1.00	3.00	1.3333	.7670
annual ems call volume	16	0	1,500,000	103,785.94	372,737.31
ems type	16	1	3	1.38	.81
ems level	18	1	3	2.89	.47
Valid N (listwise)	15				

(Tables and calculations by *SPSS*)

Completed Survey Frequencies

Statistics

		date received	frequency of training	quality of patient care	response time
N	Valid	94	93	94	94
	Missing	0	1	0	0
Mean		11/19/98	1.19	1.23	1.18
Std. Error of Mean		.	5.57E-02	6.13E-02	5.65E-02
Median		11/17/98	1.00	1.00	1.00
Mode		11/10/98	1	1	1
Std. Deviation		*****	.54	.59	.55
Variance		*****	.29	.35	.30
Skewness		.224	3.584	3.021	3.692
Std. Error of Skewness		.249	.250	.249	.249
Percentiles	25	11/10/98	1.00	1.00	1.00
	50	11/17/98	1.00	1.00	1.00
	75	12/01/98	1.00	1.00	1.00

Statistics

		quality of equipment	professional dedication of personnel	knowledge of EMS laws	internal evaluation of service quality
N	Valid	94	94	94	93
	Missing	0	0	0	1
Mean		1.29	1.39	1.54	1.69
Std. Error of Mean		6.70E-02	7.74E-02	8.10E-02	9.30E-02
Median		1.00	1.00	1.00	1.00
Mode		1	1	1	1
Std. Deviation		.65	.75	.79	.90
Variance		.42	.56	.62	.80
Skewness		2.523	2.163	1.286	1.125
Std. Error of Skewness		.249	.249	.249	.250
Percentiles	25	1.00	1.00	1.00	1.00
	50	1.00	1.00	1.00	1.00
	75	1.00	2.00	2.00	2.00

(Tables and calculations by SPSS)

Statistics

		cost effective for fire departments	customer service quality surveys	educating the public about service	motivated personnel
N	Valid	93	94	94	94
	Missing	1	0	0	0
Mean		1.91	2.13	1.90	1.59
Std. Error of Mean		9.87E-02	9.71E-02	9.81E-02	9.00E-02
Median		2.00	2.00	2.00	1.00
Mode		1	2	1	1
Std. Deviation		.95	.94	.95	.87
Variance		.91	.89	.90	.76
Skewness		.794	.529	.808	1.519
Std. Error of Skewness		.250	.249	.249	.249
Percentiles	25	1.00	1.00	1.00	1.00
	50	2.00	2.00	2.00	1.00
	75	2.00	3.00	2.00	2.00

Statistics

		professionally delivered services	newest technology and equipment	level of medical care provided	cross-trained personnel
N	Valid	94	94	94	94
	Missing	0	0	0	0
Mean		1.59	1.41	1.43	2.55
Std. Error of Mean		8.87E-02	7.62E-02	7.64E-02	.15
Median		1.00	1.00	1.00	2.00
Mode		1	1	1	1 ^a
Std. Deviation		.86	.74	.74	1.46
Variance		.74	.55	.55	2.14
Skewness		1.335	1.932	2.049	2.037
Std. Error of Skewness		.249	.249	.249	.249
Percentiles	25	1.00	1.00	1.00	1.00
	50	1.00	1.00	1.00	2.00
	75	2.00	2.00	2.00	4.00

(Tables and calculations by SPSS)

Statistics

		low fire personnel turnover	firefighters are part of community	fire departments are covered by city	ambulance companies are for-profit businesses
N	Valid	94	94	94	94
	Missing	0	0	0	0
Mean		2.06	1.90	1.91	2.93
Std. Error of Mean		.11	.11	.10	.11
Median		2.00	2.00	2.00	3.00
Mode		1	1	1	4
Std. Deviation		1.06	1.04	.99	1.10
Variance		1.11	1.08	.98	1.21
Skewness		.655	.844	.783	-.544
Std. Error of Skewness		.249	.249	.249	.249
Percentiles	25	1.00	1.00	1.00	2.00
	50	2.00	2.00	2.00	3.00
	75	3.00	3.00	3.00	4.00

a. Multiple modes exist. The smallest value is shown

Completed Survey Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
frequency of training	93	1	4	1.19	.54
quality of patient care	94	1	4	1.23	.59
response time	94	1	4	1.18	.55
quality of equipment	94	1	4	1.29	.65
professional dedication of personnel	94	1	4	1.39	.75
knowledge of EMS laws	94	1	4	1.54	.79
internal evaluation of service quality	93	1	4	1.69	.90
cost effective for fire departments	93	1	4	1.91	.95
customer service quality surveys	94	1	4	2.13	.94
educating the public about service	94	1	4	1.90	.95
motivated personnel	94	1	4	1.59	.87
professionally delivered services	94	1	4	1.59	.86
newest technology and equipment	94	1	4	1.41	.74
level of medical care provided	94	1	4	1.43	.74
cross-trained personnel	94	1	11	2.55	1.46
low fire personnel turnover	94	1	4	2.06	1.06
firefighters are part of community	94	1	4	1.90	1.04
fire departments are covered by city	94	1	4	1.91	.99
ambulance companies are for-profit businesses	94	1	4	2.93	1.10
Valid N (listwise)	91				

(Tables and calculations by SPSS)

Frequencies

Statistics

EMS use in last three years

N	Valid	93
	Missing	1

EMS use in last three years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	have used mfd	12	12.8	12.9	12.9
	have been fd	4	4.3	4.3	17.2
	have been pvt	2	2.1	2.2	19.4
	have not used mfd	2	2.1	2.2	21.5
	have not used any	53	56.4	57.0	78.5
	1 and 3	7	7.4	7.5	86.0
	3 and 4	4	4.3	4.3	90.3
	1 and 2	4	4.3	4.3	94.6
	2 and 4	3	3.2	3.2	97.8
	2 and 3	2	2.1	2.2	100.0
	Total	93	98.9	100.0	
Missing	0	1	1.1		
Total		94	100.0		

Handwritten Survey Comments
(Continued)

Survey #	Comment
0068	A for profit business is more concerned with the monetary end of the service which is not for the good of the community.
0078	I feel that private contractors will eventually milk municipalities once their contract is in place. In the long run the monies paid out could exceed what would the self-run department. Expenditures would be. Also a private company may be overly liability conscious which may affect treatment or service at a crucial moment.
0091	I consider emergency medical service very important.